the period under consideration. In such an analysis, researchers estimate the conditional event probability (hazard), i.e., the probabilities of default and prepayment, conditional on surviving to date, as defined statistically. Default and prepayment are considered competing risks because when borrowers act on one they preclude action on the other. In the context of this competing risk model, consider two termination risks: default and prepay . The hazard for individual , risk , given characteristics , parameters , and unobserved heterogeneity parameter is defined as

(1)

With a discrete time assumption, a multinomial logit model is often used to estimate the above equation.

We use a treatment control research design to estimate the differences in mortgage termination risks. We use the loan information for Energy Star (treatment) and non-Energy Star (control), supplemented with information about factors that contribute to household energy consumption. We adopt the competing risk framework of mortgage terminations and estimate the impact of prepayment and mortgage default simultaneously (Quercia and Spader 2008). A multinomial logit model is used to quantify these risks relative to one another and the tests whether risks of loans of energy-efficient homes are different from those of energy-inefficient homes:

(2)

(3)

where *Pr* is the probability, ***E*** is a set of variables of the house that relate to energy consumption (such as square feet and climate) and , ***X*** is the standard set of explanatory variables from the mortgage termination literature (such as LTV, unemployment rate, age of the loan indicator variables, etc.). *C* is an indicator